

In the Claims:

Please amend claims 1, 3, 5, 6, 7, and 14, and adds new claims 23 and 24, all as shown below.

1. (Currently Amended): A method for ~~automatically~~ dynamically generating program code, comprising:

~~determining whether a resource is available; and~~

~~dynamically generating program code when the resource is determined to be available,~~

wherein dynamically generating program code includes:

creating a class file container object;

adding a method to the class file object;

adding code to the method using programming language constructs;

generating byte code for the class file container object; and

~~generate~~ instantiating an instance of the new class file object.

2. (Original): The method of claim 1 wherein creating a class file container object includes:

setting attributes for a class file.

3. (Currently Amended): The method of claim 2 wherein the attributes include ~~at least one of~~ a class file name, and a parent super class.

4. (Original): The method of claim 1 wherein adding a method to the class file object includes:

adding a plurality of methods to the class file object.

5. (Currently Amended): The method of claim 1 wherein ~~adding code to the method includes~~ adding code to the method using the programming language constructs that correspond to

programming language statements, expressions, and variables.

6. (Currently Amended): The method of claim 5 wherein the programming language constructs include parameters.

7. (Currently Amended): The method of claim 5 wherein each statement, expression type, and variable is represented as an object.

8. (Previously Presented): The method of claim 1 wherein generating byte code for the class file container object includes:

generating an intermediate representation of program flow.

9. (Previously Presented): The method of claim 8 wherein generating byte code for the class file container object includes:

converting the intermediate representation into byte code.

10. (Original): The method of claim 1 wherein the program code implements an adaptor class.

11. (Original): The method of claim 1 wherein the program code implements a proxy class.

12. (Previously Presented): The method of claim 1 further comprising:
repeatedly adding a method to the class file object for each method associated with a stub generated for a remote object.

13. (Previously Presented): The method of claim 12 wherein repeatedly adding a method to the class file object for each method associated with a stub generated for a remote object includes:

determining a number of methods associated with the stub in a remote interface.

14. (Currently Amended): The method of claim 12 wherein adding code to the method includes:

repeatedly adding code for each method added to the class file.

15. (Previously Presented): The method of claim 1 wherein at least one of adding a method to the class file and adding code to the method includes:

generating a tree of statements.

16. (Previously Presented): The method of claim 15 wherein generating a tree of statements includes:

generating a tree representing at least one method, the at least one method comprising at least one of: a code statement, an expression, a variable and a programming construct.

17. (Previously Presented): The method of claim 15 wherein generating a tree of statements includes:

generating a tree forming a known structure when the class file container is a known type.

18. (Previously Presented): The method of claim 17 wherein generating a tree forming a known structure when the class file container is a known type includes:

generating a tree forming a known structure when the class file container is of at least one of an adapter and a proxy type.

19. (Previously Presented): The method of claim 1 wherein generating byte code for the class file container object includes:

maintaining a state of a program being generated by each statement.

20. (Previously Presented): The method of claim 19 wherein maintaining a state of a program being generated by each statement includes:

maintaining at least one of a content of a stack, a content of a variable in use during program flow.

21. (Previously Presented): The method of claim 20 further comprising: generating an intermediate representation of program flow based upon the at least one of a content of a stack, a content of a variable in use during program flow.

22. (Previously Presented): The method of claim 1 wherein determining whether a resource is available includes:

determining whether a remote object having an interface to which code is being written is available.

23. (New): The computer program product of claim 1 wherein the dynamically generated program code would be configured to exist for the life of a server it resides upon.

24. (New): The method of claim 1 further comprising:

determining whether a resource is available.